AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of making an electrically conductive material, comprising:

beginning with a phosphate binder;

adding Ag particles to the binder to obtain a mixture including Ag in an amount of between about 8% to about 70% by volume;

drying the mixture for a predetermined length of time; and

curing the mixture,

wherein said phosphate binder has a chemical formula of $AB(PO_4)$, and A is selected from one of Al, Fe, and oxides thereof.

2. (Original) The method of claim 1, wherein the curing step includes ramping a temperature of the mixture upward such that the mixture is ultimately subjected to a curing temperature of greater than about 180 ºC, but less than about 230 ºC.

3. (Currently Amended) The method of claim 1, wherein ~~said phosphate binder has a chemical formula of $AB(PO_4)$, where A is selected from one of Al, Fe, and oxides thereof, and~~ B, of the formula $AB(PO_4)$, is selected from one of Cr, Mo, and oxides thereof.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

4. (Original) The method of claim 1, further including adjusting a consistency of the phosphate binder by adding acidified H_2O.

5. (Original) The method of claim 1, wherein the step of drying further includes placing the mixture under pressure.

6. (Original) The method of claim 1, further comprising adding BN to the phosphate binder in an amount of up to about 5% by volume.

7. (Original) The method of claim 1, wherein said electrically conductive material has an operating temperature of at least three times greater than a temperature used to cure the mixture.

8. (Original) The method of claim 1, wherein the drying step proceeds until a moisture content of the mixture is between about 0.5% to about 1% water by volume.

9. (Currently Amended) An electrically conductive material, comprising:

a phosphate glass having a chemical formula $AB(PO_4)$, where A is a first metallic material and B is a second metallic material; and

Ag particles dispersed within the phosphate glass in an amount of between about 8% to about 70% by volume.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

wherein the first metallic material is selected from one of Al, Fe, and oxides thereof.

10. (Canceled)

11. (Original) The electrically conductive material of claim 9, wherein the second metallic material is selected from one of Cr, Mo, and oxides thereof.

12. (Original) The electrically conductive material of claim 9, further including BN dispersed within the phosphate glass in an amount of up to about 5% by volume.

13. (Original) The electrically conductive material of claim 9, wherein said Ag particles are less than about 5 microns in size.

14. (Original) The electrically conductive material of claim 9, wherein said electrically conductive material has a resistance in a range of about 0.1 Ω/cm to about 6 Ω/cm^2.

15. (Original) The electrically conductive material of claim 9, wherein said electrically conductive material has a curing temperature of between about 180 ºC and 230 ºC.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

16. (Original) The electrically conductive material of claim 9, wherein said electrically conductive material has an operating temperature of up to about 900 ºC.

17. (Original) An electrically conductive material, comprising:

a phosphate glass having a chemical formula $AB(PO_4)$, where A is selected from one of Al, Fe, and oxides thereof, and B is selected from one of Cr, Mo, and oxides thereof; and

Ag particles of a size less than about 5 μm that are dispersed within the phosphate glass in an amount of between about 8% to about 70% by volume, wherein said electrically conductive material has a curing temperature of between about 180 ºC and 230 ºC and an operating temperature of up to about 900 ºC.

18. (Original) The electrically conductive material of claim 17, wherein said electrically conductive material has a resistance in a range of about 0.1 Ω/cm to about 6 Ω/cm.

19. (Original) The electrically conductive material of claim 17, further including BN dispersed within the phosphate glass in an amount of up to about 5% by volume.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com